Genital *Chlamydia trachomatis* infections in Lithuanian women invited for screening via newspaper advertisement: a pilot study

Introduction

There are only single reports concerning prevalence of genital *Chlamydia trachomatis* infections in Lithuania.[1 2]

The aim of this study was to investigate the prevalence of *C trachomatis* infections in a group of Lithuanian women.

Materials and methods

Sexually active women, with genital complaints (n = 147), living in the seaport of Klaipeda, Lithuania (400 000 inhabitants) were invited for screening of genital *C trachomatis* via the local newspaper. The median and mean age of the women tested was 29 years.

The women were interviewed, examined gynaecologically, and samples taken from the cervix. Genital samples were kept frozen at –70°C for 3 months until transportation to Uppsala and polymerase chain reaction (PCR) tested for *C trachomatis*.

Statistical analysis was done using logistic regression.

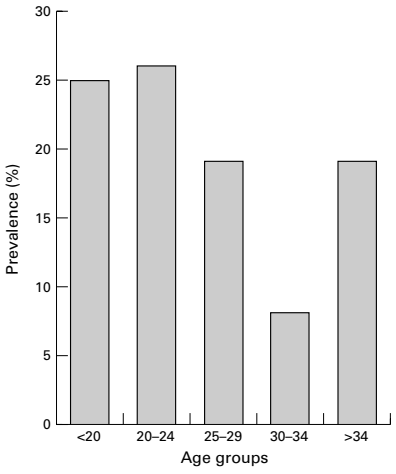

Figure 1 Prevalence of Chlamydia trachomatis infection in 147 women by age.

Results

The overall prevalence of *C trachomatis* infection was 15.6%. The chlamydial prevalence in different age groups is presented in Figure 1.

Of the women tested, 20 (14%) reported a history of genital chlamydial infection, three (2%) gonorrhoea, and four (2.8%) syphilis.

Significantly higher numbers of *C trachomatis* positive women had a history of *Neisseria gonorrhoeae* (13% *v* 0%, p<0.001). There were no other factors—that is, social, behavioural, signs, symptoms, etc, linked to the presence of *C trachomatis*.

Discussion

STDs have emerged as a serious public health problem in all of the former Soviet Union.[3] Screening for treatable STDs such as genital chlamydial infection is not performed. Risk factors for STDs have never been studied.

In the present study we managed to attract a population who otherwise would not have been tested and treated for chlamydial infection.

There was no correlation between the currently diagnosed chlamydial infection and a history of *C trachomatis* or syphilis. However, the connection with a previous gonococcal infection was found, which was also the case in another study in women with chlamydial cervicitis.[4] A history of a previous chlamydial infection, however, is doubtful owing to the absence of reliable diagnostic means of testing for *C trachomatis* infections in Lithuania.[5]

This study population was at higher risk, since women with genital complaints were invited. However, no specific marker for chlamydial infection other than age could be identified. Below the age of 29 years, the prevalence of the infection was 18–25%. However, in the higher age groups the prevalence of *C trachomatis* was also high (about 10%). With figures like these routine screening for *Chlamydia* is generally recommended.[6] Most women in the study were living in steady relationships—that is, 93% had had the same sexual partner for the past 6 months and 79% for a year. The high incidence of chlamydial infection in these women with a single partner indicates the possibility of unfaithfulness in the partner. The present study indicates that screening for genital *C trachomatis* infections should be introduced in gynaecological outpatient clinics in Lithuania. Larger population groups should be studied to for the identification of more specific risk factors of chlamydial infection.

Contributors: MD was the principal investigator, was responsible for the study design, PCR testing, data analysis, and preparation of the manuscript; OD was responsible for the sample collection, data analysis of the study result, and preparation of the manuscript; AH was responsible for the data analysis and preparation of the manuscript.

MARIUS DOMEIKA
Section of Clinical Bacteriology, Department of Medical Sciences, Uppsala University, Uppsala, Sweden

ANDERS HALLEN
Section of Dermato-Venereology

ODETA DRULYTE
Department of Obstetrics and Gynecology, Klaipeda's Seamen Hospital, Klaipeda, Lithuania

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